

MONTECITO SANITARY DISTRICT



2011 ANNUAL SUMMARY REPORT

NPDES No. CA0047899

Order No. R3-2006-0084



Montecito Sanitary District

1042 Monte Cristo Lane
Santa Barbara, CA 93108

General Manager: Diane M. Gabriel, P.E.

A Public Service Agency

PHONE: (805) 969-4200

FAX: (805) 969-9049

E-MAIL: dgabriel@montsan.org

January 30, 2012

California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

SUBJECT: NPDES Permit No. CA 0047899
Order No. R3-2006-0084
Annual Summary Report 2011

Staff of the Regional Board:

In accordance with the requirements of the general provisions of the District's NPDES Permit No. CA0047899, we are transmitting the District's Annual Report for 2011. The monitoring data compiled throughout the year is presented in both tabular and graphic form.

The report includes the names and job titles of District personnel, the Governing Board of Directors and an organizational chart.

As of January 1, 2012, the status of certified operators employed by the District are as follows:

- Brett J. Walker, Operations & Maintenance Manager, # III-6254, exp. date 12/31/2012
- Mark Liebenow, Operator, #V-8800, exp. date 06/30/2012
- James G. Montijo, Operator, # IV-2306, exp. date 12/31/2012
- William E. Caudill, Jr., Operator, # III-28148, exp. date 06/30/2012
- Preston Merlo, Operator in Training, Grade I, exp. date 12/31/2012
- Michael Sullivan, Operator, # II-9932, exp. date 12/31/2012 (*Retired 9/2011*)

During 2011, all parameters of the effluent quality were within the limits set by the District's discharge permit, with the exception of three effluent discharge events which are described on page 20 of this report.

Monthly Grease and Oil, the Ammonia (nitrogen) and the Total Coliform Organisms analyses were performed by FGL Environmental of Santa Paula, California. FGL Environmental completed the Annual Effluent / Receiving Water Testing, as well as Sludge Sampling which took place May 16, 2011 through May 20, 2011. Aquatic Bioassay & Consulting Laboratories, Inc. in Ventura, California, performed and completed the Chronic and Acute Bioassay Testing. All of the reports were submitted to the Regional Board on June 27, 2011 with the May 2011 monthly report.

California RWQCB
RE: MSD Annual Summary Report for 2011
Page 2

On September 9, 2011 Harbor Offshore completed the inspection of the District's ocean outfall pipeline. The entire outfall pipeline was inspected and videotaped. A copy of their inspection report is enclosed. The outfall pipeline was found to be in good condition with no leaks and no evidence of stress or damage of any kind.

The Operations and Maintenance Manual for the Montecito Sanitary District Wastewater Treatment Plant that is on file with your office is still valid for the existing plant.

Comments regarding the District's Collection System Maintenance and Renovation Program, as required by the NPDES permit, are included in this report on pages 20 through 23. Also included on pages 24 through 26 is a brief summary of the history of the District, our accomplishments in recent years and goals for the future. Please feel free to contact me if you have any questions or desire additional information.

Sincerely,



Diane Gabriel, P.E.
General Manager/District Engineer

Enclosure: Harbor Offshore Report – September 2011

**Montecito Sanitary District
2011 Annual Report**

TABLE OF CONTENTS

| <i>MONITORING DATA</i> | <i>PAGE NUMBER</i> |
|---|---------------------------|
| Board of Directors and Staff | 1 |
| Organizational Chart | 2 |
| Influent Daily Flow Data | 3 |
| Influent Total Suspended Solids & CBOD ₅ | 4 |
| Effluent Daily Flow Data | 5 |
| Historic Total Annual and Average Daily Flow | 6 |
| Monthly Influent / Effluent Flows | 7 |
| Avg. Monthly Effluent Temperatures / Monthly Rainfall Totals | 8 |
| Effluent Suspended Solids and CBOD ₅ | 9 |
| Effluent Mass Emissions | 10 |
| Effluent pH Data | 11 |
| Effluent Grease & Oil | 12 |
| Effluent Turbidity | 13 |
| Final Effluent Chlorine Residual | 14 |
| Effluent Total Chlorine Used | 15 |
| Effluent Ammonia / NH ₃ - N | 16 |
| Effluent Coliform Data | 17 |
| Effluent Suspended Solids and CBOD ₅ Percent Removal | 18 |
| Tabular Data for Annual Report | 19 and 19A |
| Summary Of Effluent Discharge Events 2011 | 20 |
| Collection System Maintenance and Renovation Program | 21 - 24 |
| Mission, History and Future Goals | 25 - 27 |

MONTECITO SANITARY DISTRICT

January 2011 – December 2011

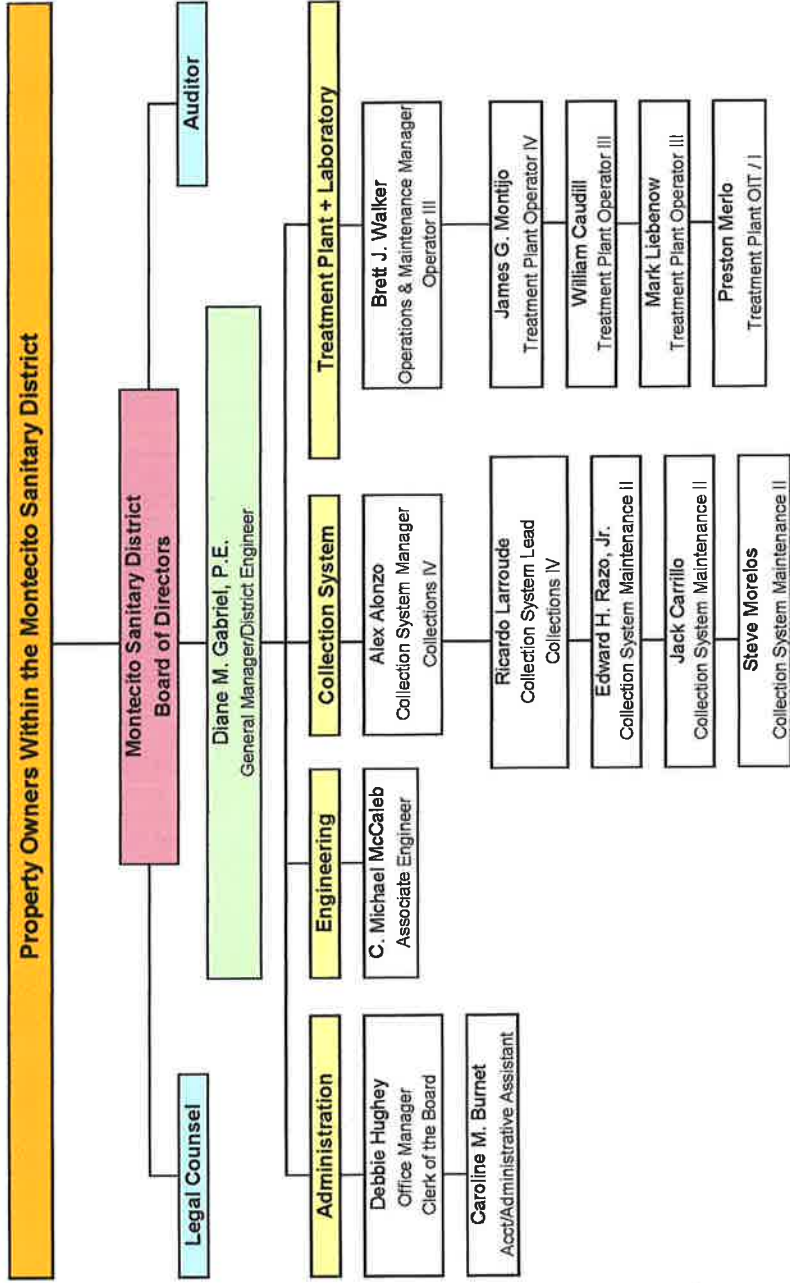
GOVERNING BOARD

| | |
|---------------------|----------------|
| Jeff Kerns | President |
| Judith M. Ishkanian | Vice President |
| Charles C. Arnold | Treasurer |
| Ed McAniff | Secretary |
| Deirdre M. Cannata | Director |

January 2011 – January 2012

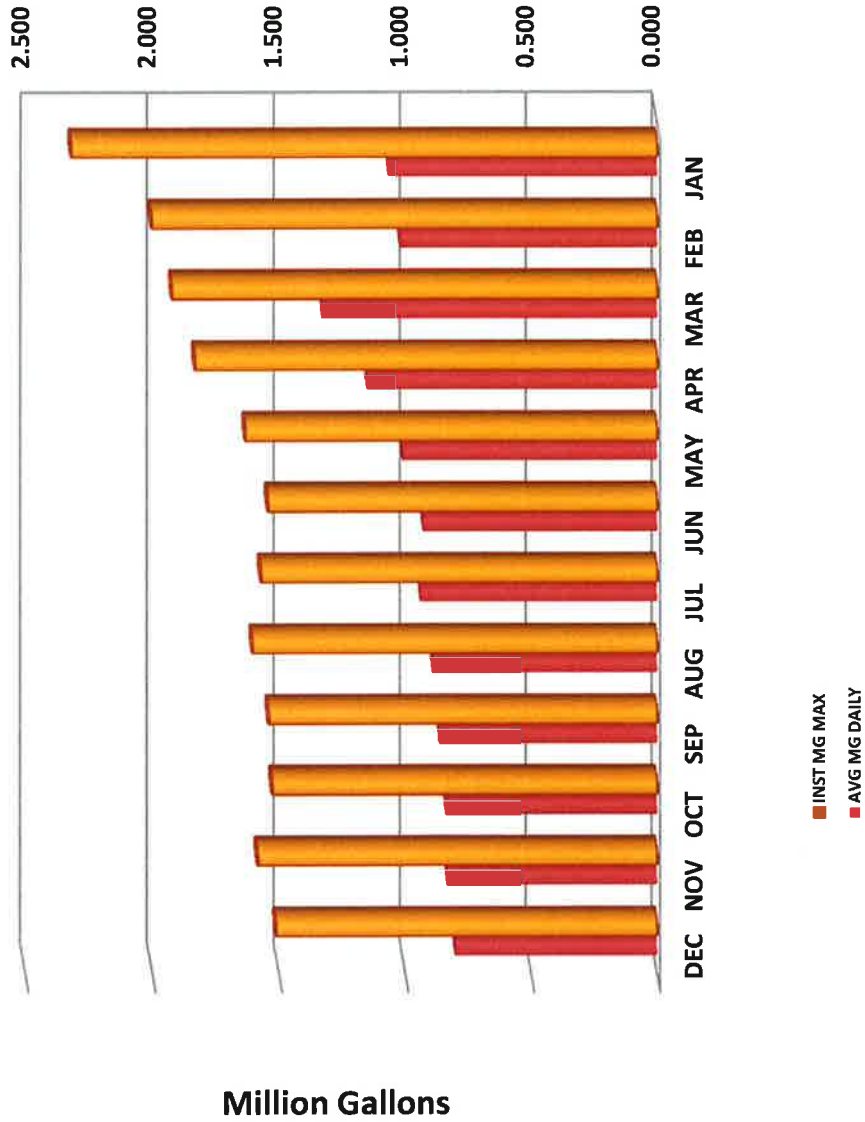
STAFF

| | |
|------------------------|--|
| Diane M. Gabriel, P.E. | General Manager/District Engineer |
| C. Michael McCaleb | Associate Engineer |
| Debbie Hughey | Office Manager/Clerk of the Board |
| Caroline M. Burnet | Accounting/Administrative Assistant |
| Brett J. Walker | Operations & Maintenance Manager |
| James G. Montijo | Operator IV |
| William E. Caudill | Operator III |
| Mark Liebenow | Operator III <i>(Hired 12/2011)</i> |
| Preston Merlo | Operator-in-Training <i>(Hired 07/2011)</i> |
| Michael D. Sullivan | Operator II <i>(Retired 07/2011)</i> |
| Alex Alonzo | Collections System Manager |
| Ricardo Larroude | Collection System Lead <i>(Hired 6/2011)</i> |
| Alvaro A. Perez | Collections II <i>(Off Duty since 08/2010)</i> |
| Jack R. Carrillo | Collections II |
| Edward H. Razo, Jr. | Collections II |
| Steve Morelos | Collections II <i>(Hired 01/2011)</i> |



**Montecito Sanitary District Organizational Chart
October 2011**

MSD 2011 Influent Daily Flow Data

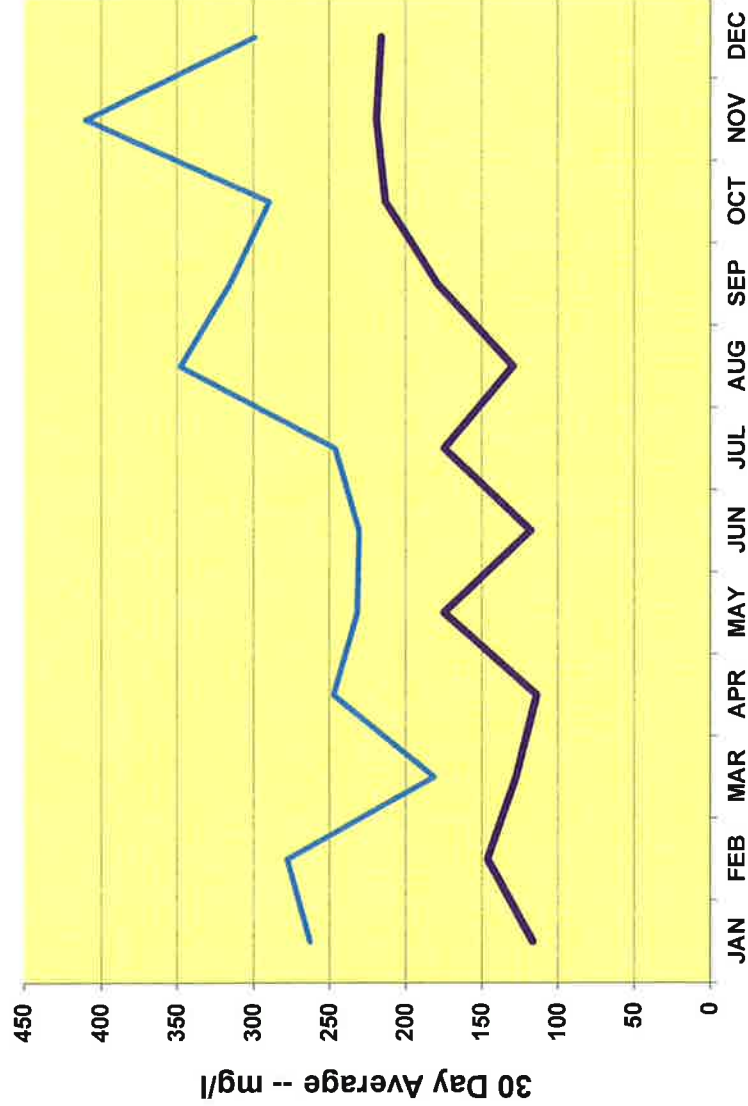


| INFLUENT FLOW DATA | | |
|--------------------|-------------|--------------|
| MONTH | INST MG MAX | AVG MG DAILY |
| JAN | 2.320 | 1.067 |
| FEB | 2.005 | 1.022 |
| MAR | 1.923 | 1.329 |
| APR | 1.832 | 1.152 |
| MAY | 1.633 | 1.012 |
| JUN | 1.544 | 0.930 |
| JUL | 1.571 | 0.940 |
| AUG | 1.605 | 0.891 |
| SEP | 1.541 | 0.864 |
| OCT | 1.527 | 0.839 |
| NOV | 1.584 | 0.834 |
| DEC | 1.512 | 0.802 |

AVG 1.716 0.974

MSD INFLUENT

TOTAL SUSPENDED SOLIDS & CBOD₅



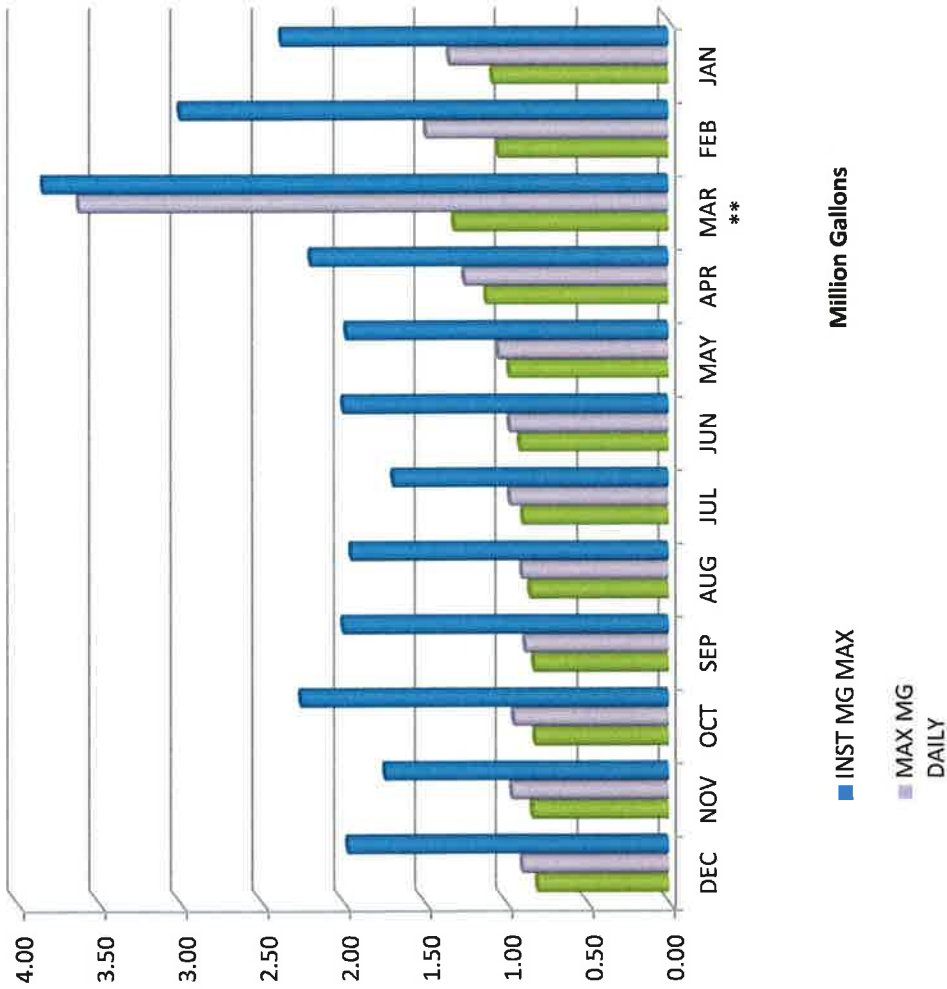
2011

— Total Suspended Solids
— CBOD₅

| Month | INFLUENT | |
|-------|-----------------------------|------------------------|
| | Total Suspended Solids mg/l | CBOD ₅ mg/l |
| JAN | 263 | 117 |
| FEB | 278 | 146 |
| MAR | 181 | 128 |
| APR | 248 | 114 |
| MAY | 232 | 175 |
| JUN | 231 | 118 |
| JUL | 246 | 175 |
| AUG | 348 | 130 |
| SEP | 316 | 179 |
| OCT | 290 | 213 |
| NOV | 410 | 219 |
| DEC | 299 | 216 |

| | | |
|------------|------------|------------|
| AVG | 278 | 161 |
|------------|------------|------------|

MSD 2011 EFFLUENT DAILY FLOW DATA

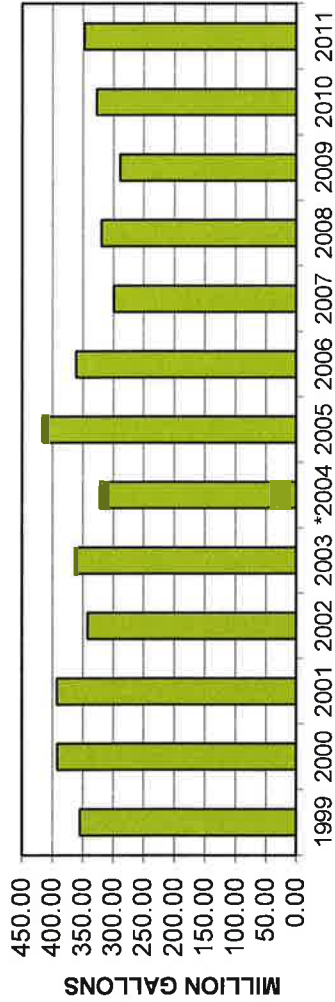


| EFFLUENT FLOW DATA | | | |
|--------------------|-------------|--------------|--------------|
| MONTH | INST MG MAX | MAX MG DAILY | AVG MG DAILY |
| JAN | 2.38 | 1.345 | 1.076 |
| FEB | 3.00 | 1.488 | 1.040 |
| MAR** | 3.84 | 3.621 | 1.315 |
| APR | 2.20 | 1.251 | 1.115 |
| MAY | 1.98 | 1.041 | 0.974 |
| JUN | 2.00 | 0.972 | 0.909 |
| JUL | 1.69 | 0.970 | 0.890 |
| AUG | 1.95 | 0.897 | 0.848 |
| SEP | 2.00 | 0.878 | 0.824 |
| OCT | 2.26 | 0.948 | 0.819 |
| NOV | 1.74 | 0.960 | 0.834 |
| DEC | 1.97 | 0.896 | 0.803 |

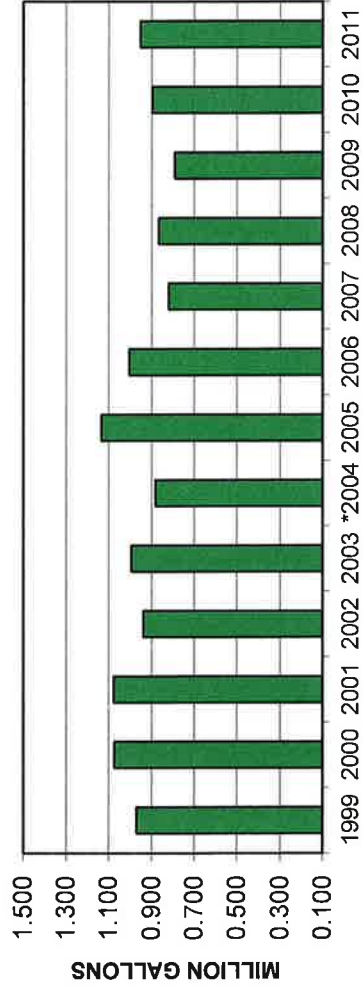
| YEARLY AVERAGES | |
|-----------------|-------|
| 2.25 | 1.272 |
| | 0.954 |

** These flows occurred on March 20th following four days of significant rain fall totaling over 6 inches.

Historic Total Annual Effluent Flow



Historic Average Daily Effluent Flow

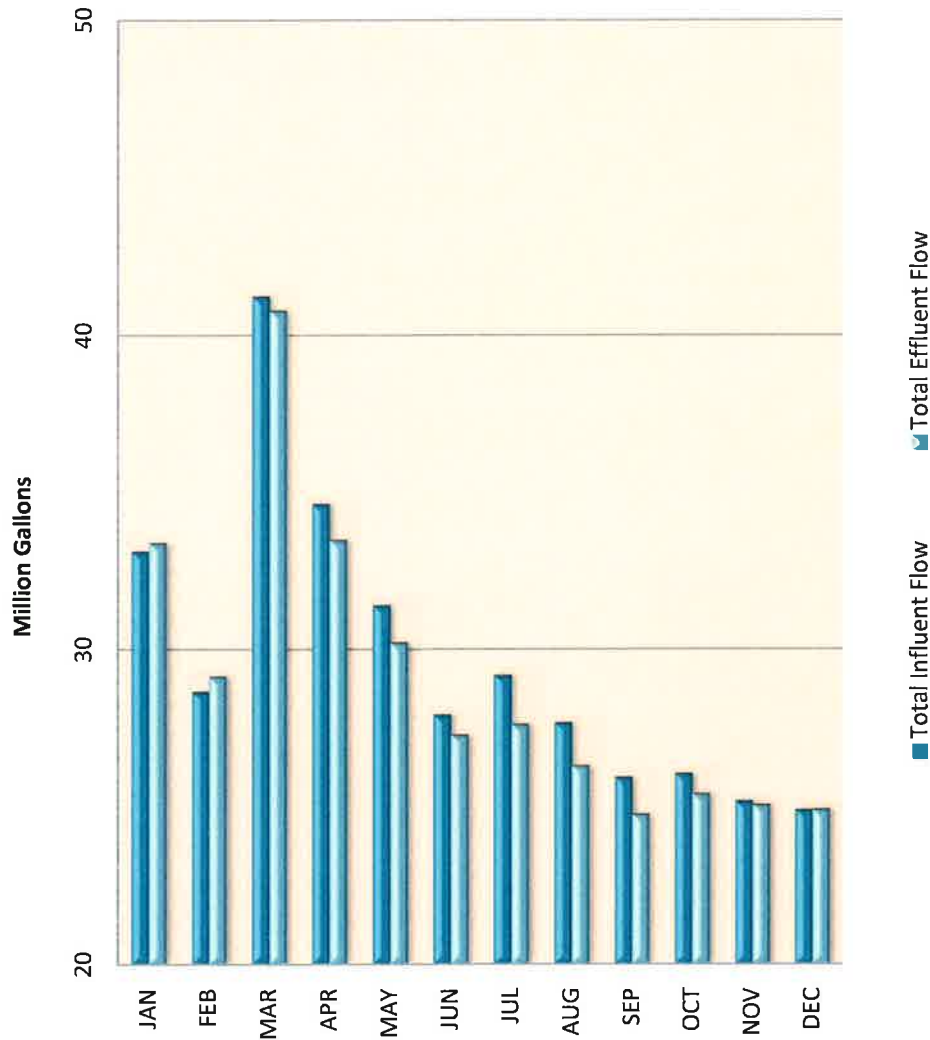


| YEAR | TOTAL ANNUAL FLOW | AVG DAILY FLOW |
|-------|-------------------|----------------|
| 1999 | 354.80 | 0.972 |
| 2000 | 392.00 | 1.074 |
| 2001 | 392.60 | 1.076 |
| 2002 | 342.20 | 0.938 |
| 2003 | 363.35 | 0.996 |
| *2004 | 322.40 | 0.881 |
| 2005 | 415.28 | 1.135 |
| 2006 | 361.23 | 1.005 |
| 2007 | 299.15 | 0.820 |
| 2008 | 319.48 | 0.867 |
| 2009 | 289.00 | 0.792 |
| 2010 | 327.40 | 0.897 |
| 2011 | 348.00 | 0.954 |

| YEAR | TOTAL ANNUAL FLOW | AVG DAILY FLOW |
|-------|-------------------|----------------|
| 1999 | 354.80 | 0.972 |
| 2000 | 392.00 | 1.074 |
| 2001 | 392.60 | 1.076 |
| 2002 | 342.20 | 0.938 |
| 2003 | 363.35 | 0.996 |
| *2004 | 322.40 | 0.881 |
| 2005 | 415.28 | 1.135 |
| 2006 | 361.23 | 1.005 |
| 2007 | 299.15 | 0.820 |
| 2008 | 319.48 | 0.867 |
| 2009 | 289.00 | 0.792 |
| 2010 | 327.40 | 0.897 |
| 2011 | 348.00 | 0.954 |

* = New effluent flow meter installed on April 10, 2004.

MSD TOTAL MONTHLY INFLUENT AND EFFLUENT FLOWS FOR 2011



| Month | Total Influent Flow | Total Effluent Flow |
|--------------|---------------------|---------------------|
| JAN | 33.088 | 33.37 |
| FEB | 28.625 | 29.11 |
| MAR | 41.205 | 40.75 |
| APR | 34.599 | 33.46 |
| MAY | 31.377 | 30.20 |
| JUN | 27.894 | 27.26 |
| JUL | 29.143 | 27.59 |
| AUG | 27.634 | 26.28 |
| SEP | 25.905 | 24.73 |
| OCT | 26.020 | 25.38 |
| NOV | 25.143 | 25.03 |
| DEC | 24.864 | 24.89 |
| Total | 355.5 | 348.0 |

Million Gallons

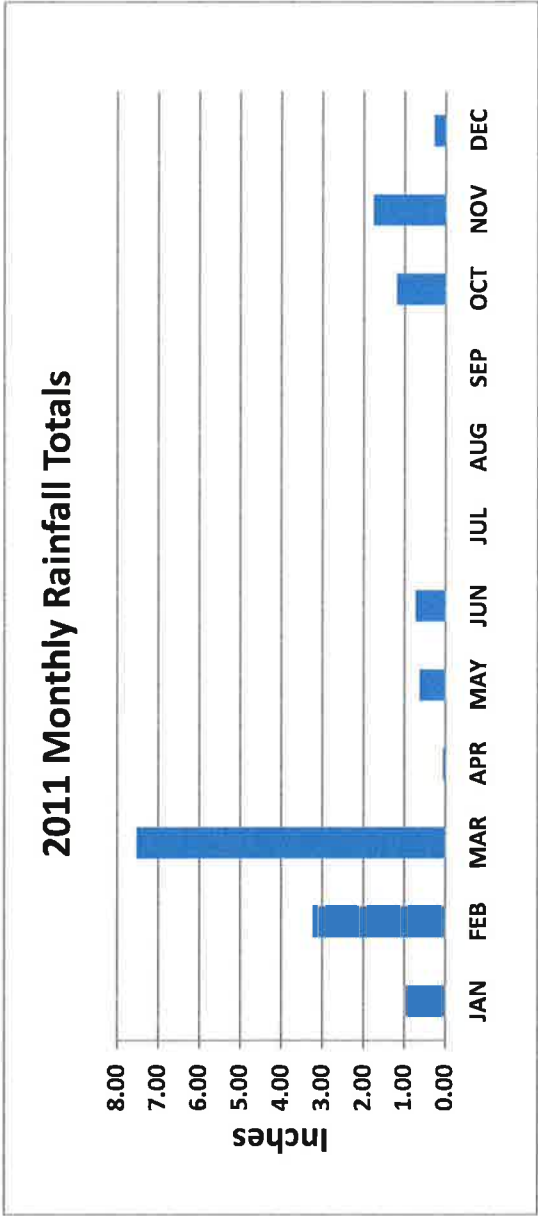
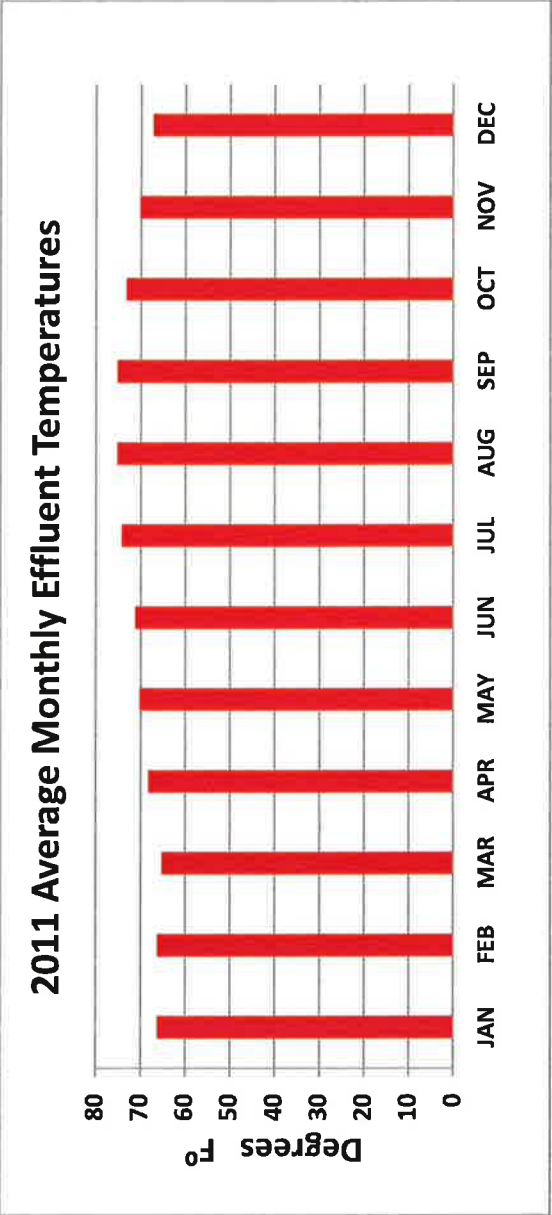
Note: Influent and Effluent flow variations are due to process recycled flows and process cleaning or maintenance draining water back to the headworks. Additionally, two different flow measuring devices are used "in-pipe" (Influent) and open channel (Effluent).

| Month | AVG Temp Degrees F ° |
|-------|-------------------------|
| JAN | 66 |
| FEB | 66 |
| MAR | 65 |
| APR | 68 |
| MAY | 70 |
| JUN | 71 |
| JUL | 74 |
| AUG | 75 |
| SEP | 75 |
| OCT | 73 |
| NOV | 70 |
| DEC | 67 |

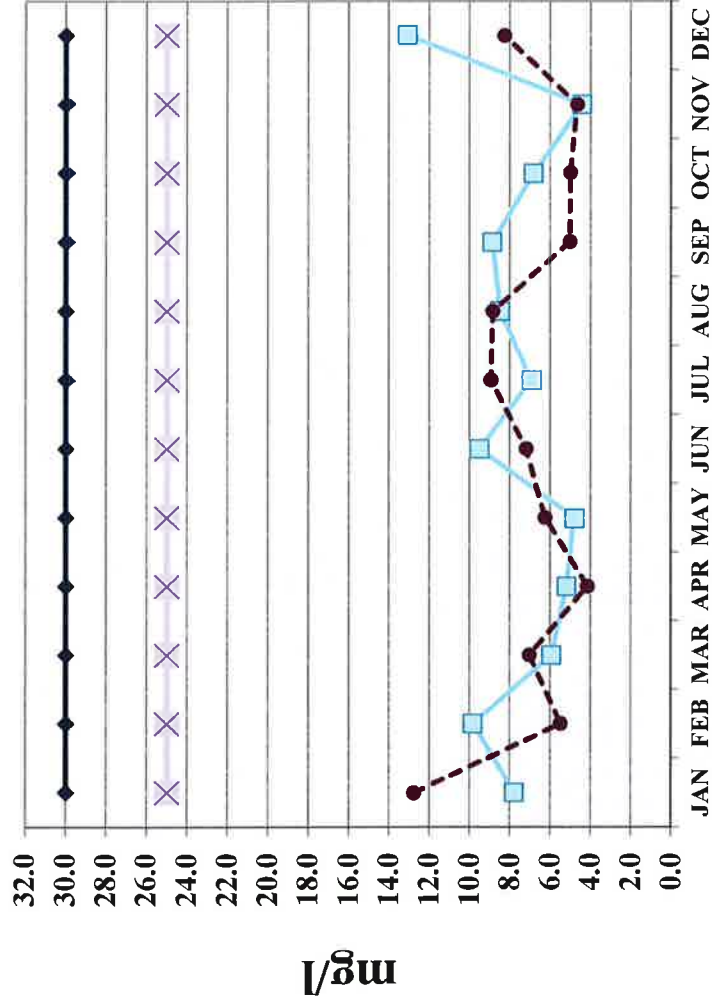
| | |
|------------|-----------|
| AVG | 70 |
|------------|-----------|

| Month | Rainfall Inches |
|-------|--------------------|
| JAN | 0.97 |
| FEB | 3.22 |
| MAR | 7.53 |
| APR | 0.06 |
| MAY | 0.63 |
| JUN | 0.73 |
| JUL | 0.00 |
| AUG | 0.00 |
| SEP | 0.00 |
| OCT | 1.20 |
| NOV | 1.77 |
| DEC | 0.29 |

| | |
|--------------|--------------|
| TOTAL | 16.39 |
|--------------|--------------|

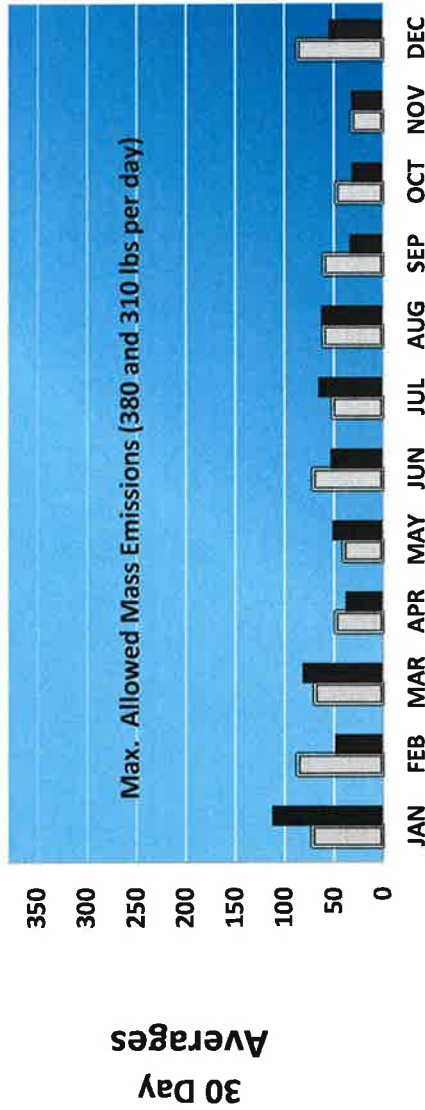


2011 EFFLUENT Suspended Solids & CBOD₅



| Month | NPDES SS Limit mg/l | Effluent Suspended Solids mg/l | NPDES CBOD ₅ Limit mg/L | Effluent CBOD ₅ mg/l |
|------------------------|------------------------|-----------------------------------|---------------------------------------|------------------------------------|
| JAN | 30.0 | 7.8 | 25.0 | 12.7 |
| FEB | 30.0 | 9.8 | 25.0 | 5.5 |
| MAR | 30.0 | 6.0 | 25.0 | 7.0 |
| APR | 30.0 | 5.2 | 25.0 | 4.2 |
| MAY | 30.0 | 4.8 | 25.0 | 6.3 |
| JUN | 30.0 | 9.5 | 25.0 | 7.2 |
| JUL | 30.0 | 7.0 | 25.0 | 8.9 |
| AUG | 30.0 | 8.5 | 25.0 | 8.9 |
| SEP | 30.0 | 8.9 | 25.0 | 5.0 |
| OCT | 30.0 | 6.8 | 25.0 | 5.0 |
| NOV | 30.0 | 4.4 | 25.0 | 4.7 |
| DEC | 30.0 | 13.0 | 25.0 | 8.3 |
| Monthly Average | | 7.7 | | 7.0 |

MSD Effluent Mass Emissions Suspended Solids and CBOD₅



2011

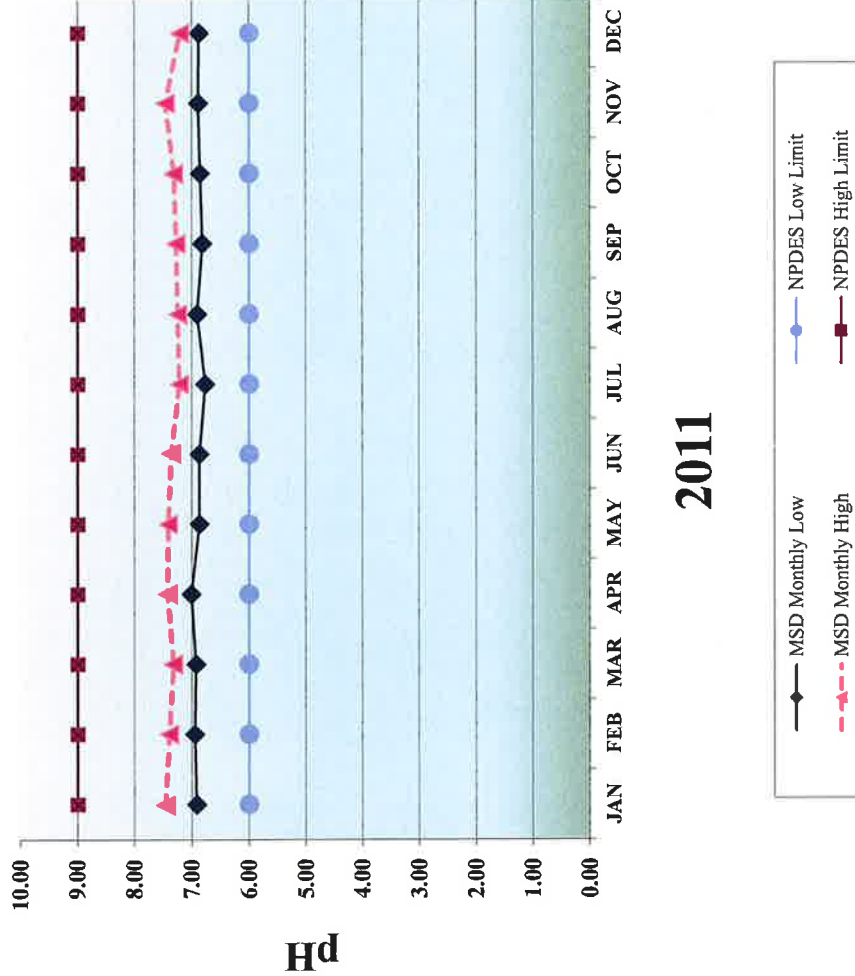
■ Suspended Solids
 ■ CBOD₅

| Month | Effluent | |
|-------|--------------------------|------------------------------------|
| | Suspended Solids lbs/day | Effluent CBOD ₅ lbs/day |
| JAN | 72 | 113 |
| FEB | 86 | 49 |
| MAR | 69 | 82 |
| APR | 48 | 38 |
| MAY | 40 | 52 |
| JUN | 71 | 54 |
| JUL | 51 | 66 |
| AUG | 61 | 63 |
| SEP | 60 | 34 |
| OCT | 47 | 32 |
| NOV | 31 | 32 |
| DEC | 86 | 56 |

| | | |
|------------|-----------|-----------|
| AVG | 60 | 56 |
|------------|-----------|-----------|

| | | |
|--------------------|-------------|-------------|
| Max Allowed | lbs per day | lbs per day |
| | 380 | 310 |

MSD EFFLUENT pH Data

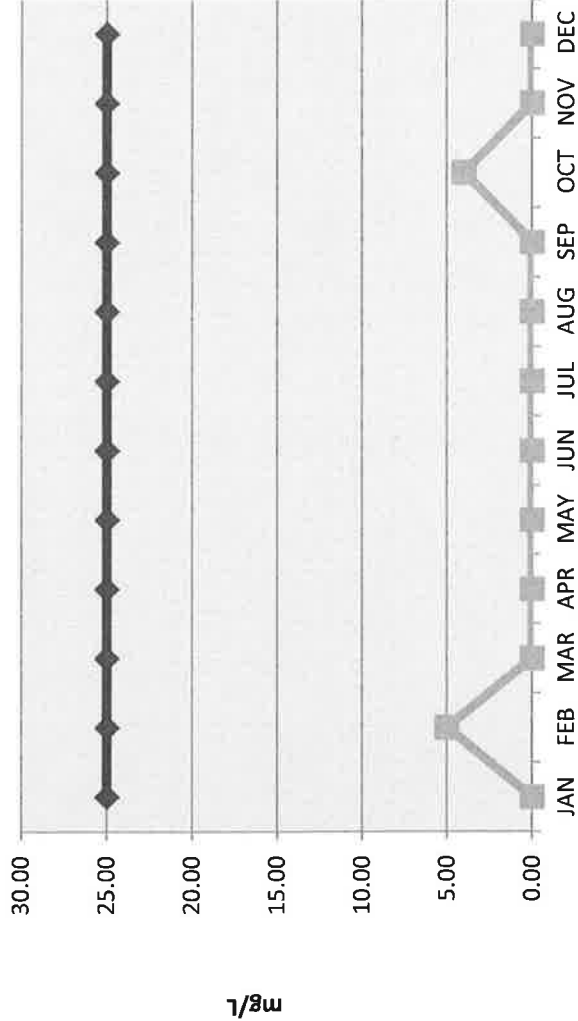


2011

AVERAGES

| | |
|-------------|-------------|
| 6.89 | 7.35 |
|-------------|-------------|

MSD EFFLUENT Grease & Oil



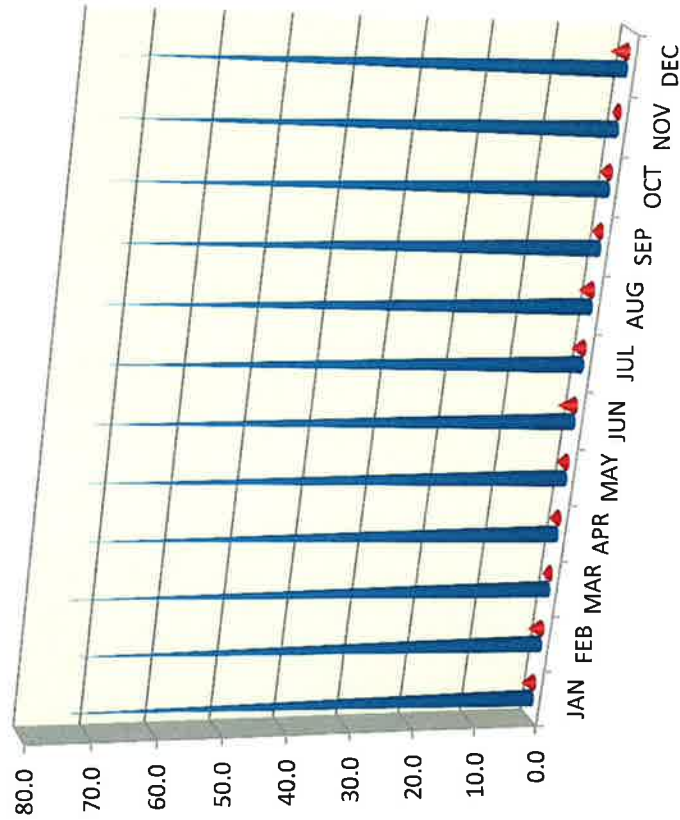
2011

NPDES Limit
 Monthly Avg mg/l

| Grease & Oil | | |
|--------------|-------------|------------------|
| Month | NPDES Limit | Monthly Avg mg/l |
| JAN | 25.00 | 0.0 |
| FEB | 25.00 | 5.0 |
| MAR | 25.00 | 0.0 |
| APR | 25.00 | 0.0 |
| MAY | 25.00 | 0.0 |
| JUN | 25.00 | 0.0 |
| JUL | 25.00 | 0.0 |
| AUG | 25.00 | 0.0 |
| SEP | 25.00 | 0.0 |
| OCT | 25.00 | 4.0 |
| NOV | 25.00 | 0.0 |
| DEC | 25.00 | 0.0 |

Note:
 The laboratory analysis Method
 Detection Limit (MDL) is 3.0 mg/L
 Non Detect is reported as 0.0 mg/L

EFFLUENT Turbidity



2011

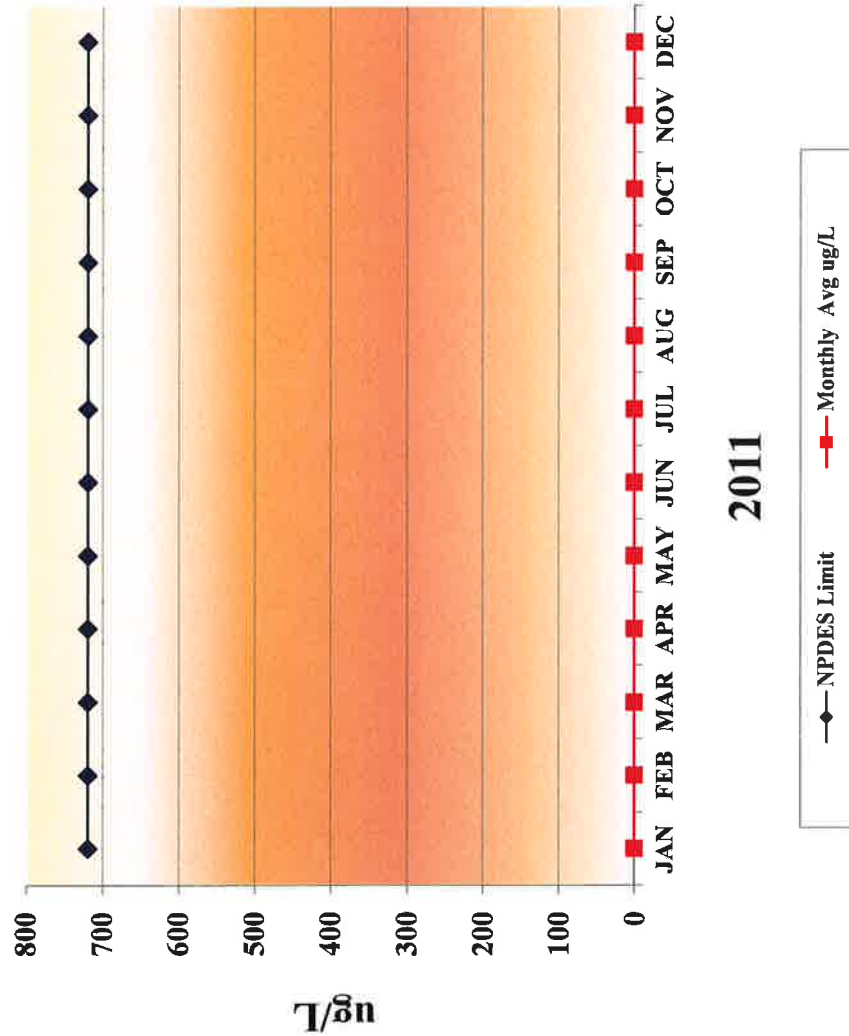
■ NPDES Limit
■ Monthly Avg

| Turbidity - NTU | | |
|-----------------|-------------|-------------|
| Month | NPDES Limit | Monthly Avg |
| JAN | 75.0 | 2.0 |
| FEB | 75.0 | 2.3 |
| MAR | 75.0 | 1.2 |
| APR | 75.0 | 1.4 |
| MAY | 75.0 | 1.7 |
| JUN | 75.0 | 2.8 |
| JUL | 75.0 | 1.9 |
| AUG | 75.0 | 2.2 |
| SEP | 75.0 | 1.4 |
| OCT | 75.0 | 1.5 |
| NOV | 75.0 | 1.0 |
| DEC | 75.0 | 2.7 |

| | | |
|--|-----|-----|
| | AVG | 1.8 |
|--|-----|-----|

NTU= Nephelometric
Turbidity Unit

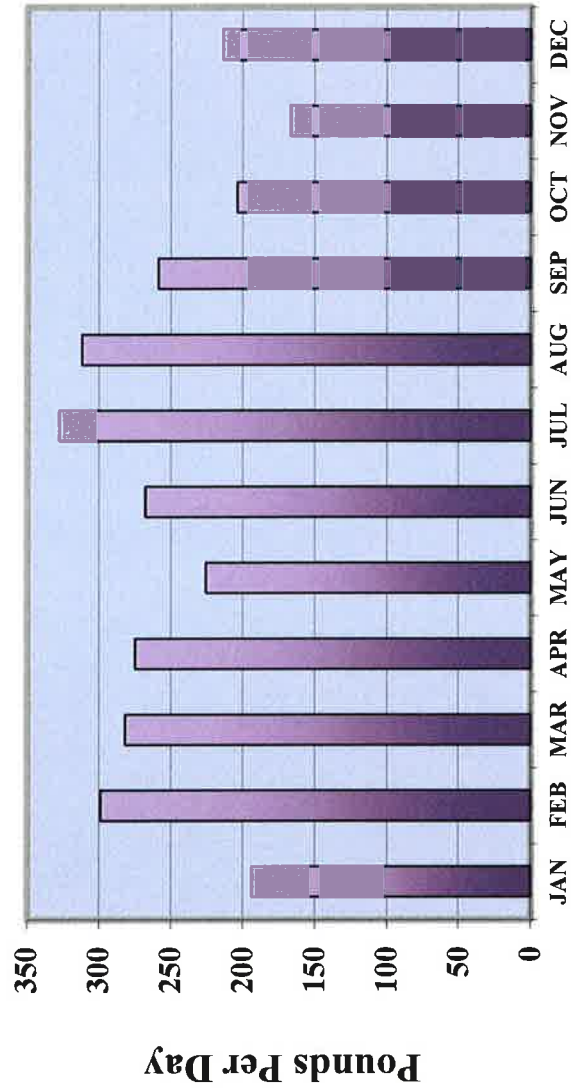
FINAL EFFLUENT Chlorine (Cl₂) Residual



| CHLORINE RESIDUAL | | |
|-------------------|-------------|------------------|
| Month | NPDES Limit | Monthly Avg ug/L |
| JAN | 720 | 0 |
| FEB | 720 | 0 |
| MAR | 720 | 0 |
| APR | 720 | 0 |
| MAY | 720 | 0 |
| JUN | 720 | 0 |
| JUL | 720 | 0 |
| AUG | 720 | 0 |
| SEP | 720 | 0 |
| OCT | 720 | 0 |
| NOV | 720 | 0 |
| DEC | 720 | 0 |

| | |
|-----|---|
| AVG | 0 |
|-----|---|

EFFLUENT Total Chlorine (Cl₂) Used



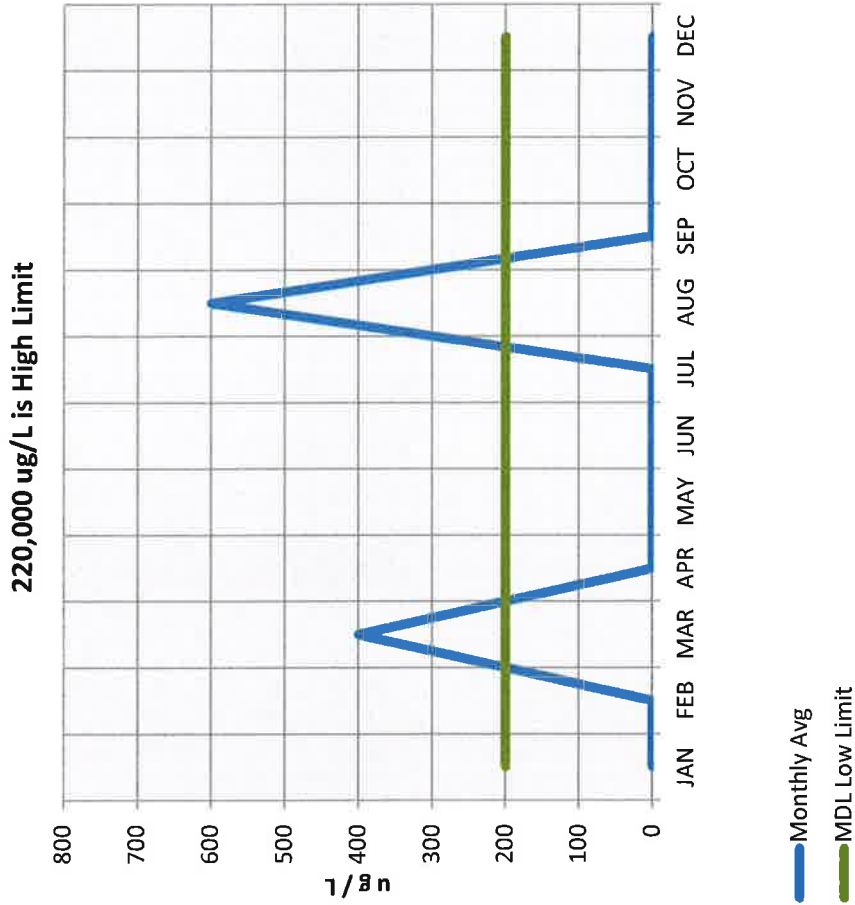
2011

■ Daily Average

| Month | Daily Average lbs Per Day |
|-------|------------------------------|
| JAN | 194 |
| FEB | 299 |
| MAR | 282 |
| APR | 275 |
| MAY | 226 |
| JUN | 268 |
| JUL | 328 |
| AUG | 312 |
| SEP | 259 |
| OCT | 204 |
| NOV | 167 |
| DEC | 214 |

| AVG | 252 |
|-----|-----|
|-----|-----|

2011 MSD Effluent Ammonia / NH₃ - N

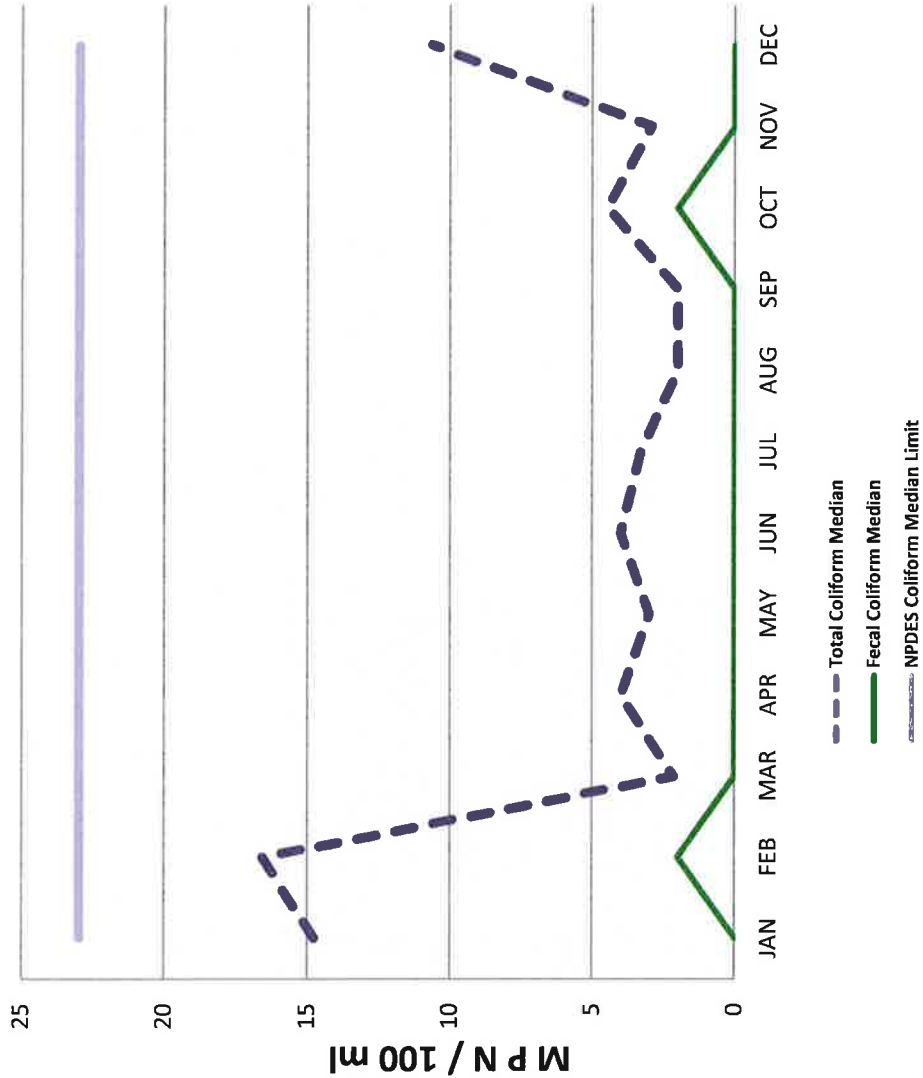


| | Ammonia / NH ₃ -N | | |
|-----|------------------------------|--------------------|-----------------------|
| | Monthly Avg ug/L | MDL Low Limit ug/L | NPDES High Limit ug/L |
| JAN | 0 | 200 | 220,000 |
| FEB | 0 | 200 | 220,000 |
| MAR | 400 | 200 | 220,000 |
| APR | 0 | 200 | 220,000 |
| MAY | 0 | 200 | 220,000 |
| JUN | 0 | 200 | 220,000 |
| JUL | 0 | 200 | 220,000 |
| AUG | 600 | 200 | 220,000 |
| SEP | 0 | 200 | 220,000 |
| OCT | 0 | 200 | 220,000 |
| NOV | 0 | 200 | 220,000 |
| DEC | 0 | 200 | 220,000 |

AVG 83

Note:
The laboratory Method Detection Limit (MDL) is 200 ug/L
Non Detect is reported as 0 ug/L

MSD Effluent Coliform Data for 2011

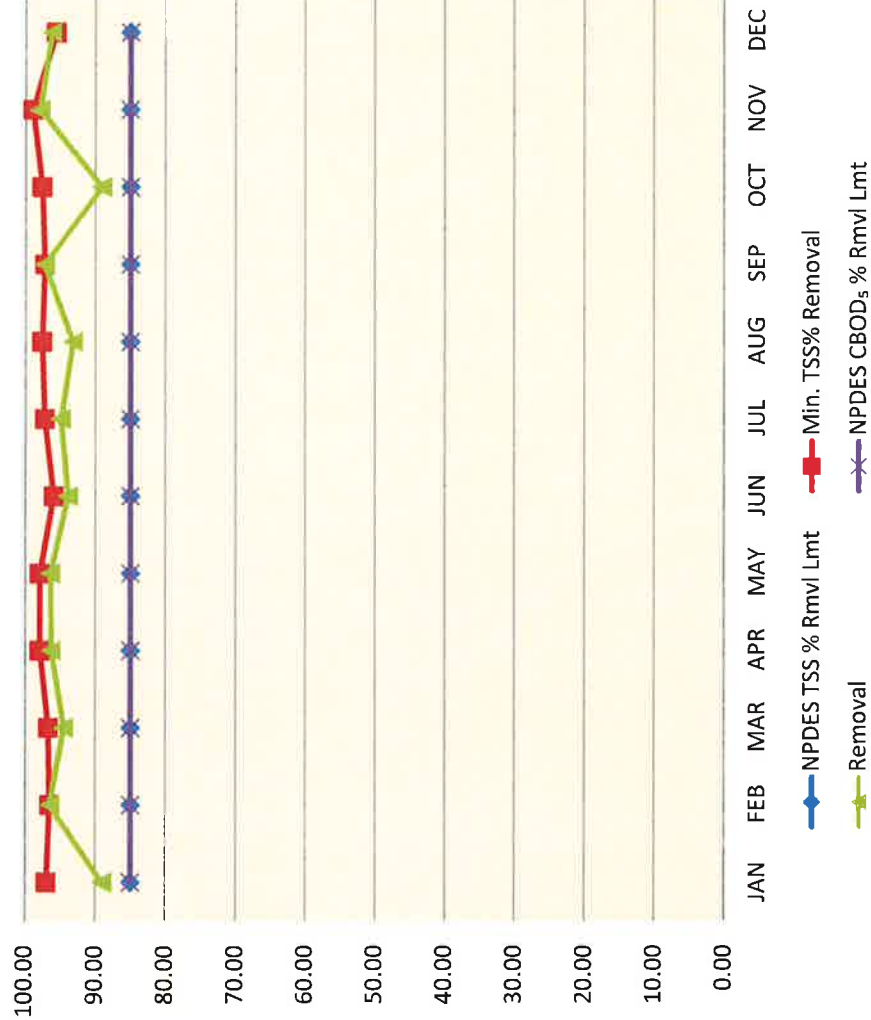


| Month | Total Coliform Median | Fecal Coliform Median | NPDES Coliform Median Limit |
|-------|-----------------------|-----------------------|-----------------------------|
| JAN | 15 | <2 | 23 |
| FEB | 17 | 2 | 23 |
| MAR | 2 | <2 | 23 |
| APR | 4 | <2 | 23 |
| MAY | 3 | <2 | 23 |
| JUN | 4 | <2 | 23 |
| JUL | 3 | <2 | 23 |
| AUG | 2 | <2 | 23 |
| SEP | 2 | <2 | 23 |
| OCT | 4 | 2 | 23 |
| NOV | 3 | <2 | 23 |
| DEC | 11 | <2 | 23 |

| Median | 3 | <2 |
|--------|---|----|
|--------|---|----|

Note:
 The Method Detection Limit (MDL) for total and fecal coliform range is 2 MPN/100 ml - 160,000 MPN/100 ml

2011 EFFLUENT Suspended Solids & CBOD5 Percent Removal



| Month | NPDES TSS % Rmvl Lmt | Monthly Min. TSS% Removal | NPDES CBOD5 % Rmvl Lmt | Monthly CBOD5 % Removal |
|-------|----------------------|---------------------------|------------------------|-------------------------|
| JAN | 85.0 | 97.0 | 85.0 | 89.1 |
| FEB | 85.0 | 96.5 | 85.0 | 96.5 |
| MAR | 85.0 | 96.7 | 85.0 | 94.5 |
| APR | 85.0 | 97.9 | 85.0 | 96.3 |
| MAY | 85.0 | 97.9 | 85.0 | 96.4 |
| JUN | 85.0 | 95.9 | 85.0 | 93.9 |
| JUL | 85.0 | 97.2 | 85.0 | 94.9 |
| AUG | 85.0 | 97.6 | 85.0 | 93.2 |
| SEP | 85.0 | 97.2 | 85.0 | 97.2 |
| OCT | 85.0 | 97.6 | 85.0 | 89.1 |
| NOV | 85.0 | 98.9 | 85.0 | 97.9 |
| DEC | 85.0 | 95.6 | 85.0 | 96.2 |

Monthly Average **97.2**

94.6

Tabular Data for 2011 Summary Report

| | | INFLUENT | | | | | |
|---------------|-----------------------|---------------|---------------|----------------|---------------|------------------------------|-----------------------------|
| 2011 Month | Monthly Total Flow MG | Inst Peak MGD | Avg Daily MGD | 6-day TSS mg/L | 6-day TSS lbs | 6-day CBOD ₅ mg/L | 6-day CBOD ₅ lbs |
| Jan | 33,088 | 2,320 | 1,067 | 263 | 2,374 | 117 | 1,047 |
| Feb | 28,625 | 2,005 | 1,022 | 278 | 2,436 | 146 | 1,294 |
| Mar | 41,205 | 1,923 | 1,329 | 181 | 1,730 | 128 | 1,248 |
| Apr | 34,599 | 1,832 | 1,152 | 248 | 2,284 | 114 | 1,050 |
| May | 31,377 | 1,633 | 1,012 | 232 | 1,881 | 175 | 1,435 |
| Jun | 27,894 | 1,544 | 0,930 | 231 | 1,720 | 118 | 877 |
| Jul | 29,143 | 1,571 | 0,940 | 246 | 1,825 | 175 | 1,295 |
| Aug | 27,634 | 1,605 | 0,891 | 348 | 2,481 | 130 | 920 |
| Sep | 25,905 | 1,541 | 0,864 | 316 | 2,133 | 179 | 1,210 |
| Oct | 26,020 | 1,527 | 0,839 | 290 | 1,998 | 213 | 1,491 |
| Nov | 25,143 | 1,584 | 0,834 | 410 | 2,888 | 219 | 1,560 |
| Dec | 24,864 | 1,512 | 0,802 | 299 | 1,982 | 216 | 1,434 |
| AVG | 29,625 | 1,716 | 0,974 | 278 | 2,144 | 161 | 1,238 |
| TOTALS | 355.5 | | | | | | |

| | | FINALEFFLUENT | | | | | |
|---------------------|------------------------|---------------|---------------|--------------|----------------|---------------|----------------------------|
| Monthly Rain Inches | Monthly Total Flow MGM | Inst Peak MGD | Max Daily MGD | Avg MGD | 6-day TSS mg/L | 6-day TSS lbs | Monthly Min. TSS % Removal |
| 0.97 | 33.37 | 2.38 | 1.345 | 1.076 | 8 | 72 | 97.0 |
| 3.22 | 29.11 | 3.00 | 1.488 | 1.040 | 10 | 86 | 96.5 |
| 7.53 | 40.75 | 3.84 | 3.621 | 1.315 | 6 | 69 | 96.7 |
| 0.06 | 33.46 | 2.20 | 1.251 | 1.115 | 5 | 48 | 97.9 |
| 0.63 | 30.20 | 1.98 | 1.041 | 0.974 | 5 | 40 | 97.9 |
| 0.73 | 27.26 | 2.00 | 0.972 | 0.909 | 10 | 71 | 95.9 |
| 0.00 | 27.59 | 1.69 | 0.970 | 0.890 | 7 | 51 | 97.2 |
| 0.00 | 26.28 | 1.95 | 0.897 | 0.848 | 9 | 61 | 97.6 |
| 0.00 | 24.73 | 2.00 | 0.878 | 0.824 | 9 | 60 | 97.2 |
| 1.20 | 25.38 | 2.26 | 0.948 | 0.819 | 7 | 47 | 97.6 |
| 1.77 | 25.03 | 1.74 | 0.960 | 0.834 | 4 | 31 | 98.9 |
| 0.29 | 24.89 | 1.97 | 0.896 | 0.803 | 13 | 86 | 95.6 |
| | 29,004 | 2.25 | 1.272 | 0.954 | 7.7 | 60 | 97.2 |
| 16.39 | 348.0 | | | | | | |

Tabular Data for 2011 Summary Report

| FINAL EFFLUENT | | | | | | | | | | | | | | | |
|------------------------------------|-----------------------------------|--|---------------------------------------|--------------------------------------|--------------------------|-----------------------------|----------------------|------------------|-----------------|---|-------------------------------------|------------|---------------------------------|---------------------------------|--|
| 6-day CBOD ₅ mg/L | 6-day CBOD ₅ lbs | Monthly Min. CBOD ₅ % Removal | Monthly NH ₃ -N ug/L | Monthly NH ₃ -N lbs | Monthly O & G mg/l | Monthly O & G lbs/day | 6-day Turb NTU | pH High SU | pH Low SU | Final Effluent Cl ₂ ug/L | Cl ₂ Total lbs/day | Temp °F | Coliform Median Total MPN | Coliform Median Fecal MPN | |
| 12.7 | 113 | 89.1 | 0 | 0 | 0 | 0 | 2.0 | 7.47 | 6.92 | 0.0 | 194 | 66 | 15 | <2 | |
| 5.5 | 49 | 96.5 | 0 | 0 | 5 | 41 | 2.3 | 7.40 | 6.95 | 0.0 | 299 | 66 | 17 | 2 | |
| 7.0 | 82 | 94.5 | 400 | 4 | 0 | 0 | 1.2 | 7.33 | 6.93 | 0.0 | 282 | 65 | 2 | <2 | |
| 4.2 | 38 | 96.3 | 0 | 0 | 0 | 0 | 1.4 | 7.43 | 7.01 | 0.0 | 275 | 68 | 4 | <2 | |
| 6.3 | 52 | 96.4 | 0 | 0 | 0 | 0 | 1.7 | 7.42 | 6.87 | 0.0 | 226 | 70 | 3 | <2 | |
| 7.2 | 54 | 93.9 | 0 | 0 | 0 | 0 | 2.8 | 7.37 | 6.87 | 0.0 | 268 | 71 | 4 | <2 | |
| 8.9 | 66 | 94.9 | 0 | 0 | 0 | 0 | 1.9 | 7.22 | 6.77 | 0.0 | 328 | 74 | 3 | <2 | |
| 8.9 | 63 | 93.2 | 600 | 4 | 0 | 0 | 2.2 | 7.25 | 6.91 | 0.0 | 312 | 75 | 2 | <2 | |
| 5.0 | 34 | 97.2 | 0 | 0 | 0 | 0 | 1.4 | 7.28 | 6.82 | 0.0 | 259 | 75 | 2 | <2 | |
| 5.0 | 32 | 89.1 | 0 | 0 | 4 | 28 | 1.5 | 7.32 | 6.86 | 0.0 | 204 | 73 | 4 | 2 | |
| 4.7 | 32 | 97.9 | 0 | 0 | 0 | 0 | 1.0 | 7.47 | 6.89 | 0.0 | 167 | 70 | 3 | <2 | |
| 8.3 | 56 | 96.2 | 0 | 0 | 0 | 0 | 2.7 | 7.21 | 6.88 | 0.0 | 214 | 67 | 11 | <2 | |

| | | | | | | | | | | | | | | | |
|------------|-----------|-------------|-----------|----------|--|------------|-------------|-------------|----------|------------|-----------|----------|---------------|----------|------------|
| 7.0 | 56 | 94.6 | 83 | 1 | | 1.8 | 7.35 | 6.89 | 0 | 252 | 70 | 3 | Median | 2 | AVG |
|------------|-----------|-------------|-----------|----------|--|------------|-------------|-------------|----------|------------|-----------|----------|---------------|----------|------------|

MONTECITO SANITARY DISTRICT

Summary of Effluent Discharge Events 2011

During 2011 there were three effluent discharge events that were reported to the Central Coast Regional Water Quality Control Board, as required by the District's NPDES Permit.

1. January 3, 2011: Reported that the NPDES Permit requirement for Total Coliform 7 sampling event median of 23 MPN had been exceeded and that 30 MPN was being reported. Late December 2010 storm events with over 11 inches of rainfall and collection system Inflow & Infiltration resulted in the hydraulic overloading the wastewater treatment facility processes.
2. February 14, 2011: Reported that the NPDES Permit requirement for Total Coliform 7 sampling event median of 23 MPN had been exceeded and that 30 MPN was being reported. Late January and early February storms were determined to be the primary cause. However, staff was collecting and testing duplicate coliform samples in early February 2011 resulting in two values that could be reported. One Total Coliform in a set of duplicate samples resulted in a 23 MPN Median "Non Violation", and the second of the duplicate samples resulted in a 30 MPN Median. The 30 MPN was used as the Median that was reported, resulting in a reported Total Coliform 7 in excess of 23 MPN.
3. April 24, 2011: Operator errors occurred such that approximately 5,100 gallons of secondary effluent was discharged to the ocean without adequate disinfection. Notifications went out to the Central Coast RWQCB and Santa Barbara County EHS. After seven days of beach and ocean sampling as required by the District's NPDES Permit, officials at the Central Coast Regional Water Quality Control Board determined that this was a "Non-Event".

All documentation for each of the above notifications to the Central Coast Regional Water Quality Control Board, the State Department of Health Services and SB County Department Environmental Health Services, were included with the monthly reporting requirements as well as the California Water Boards - CWIQS Electronic Self-Monitoring Report System or ESMR.

MONTECITO SANITARY DISTRICT

Collection System Maintenance and Renovation Program 2011

OBJECTIVE

To reduce Sanitary Sewer Overflows (SSO's), increase system reliability, optimize service life of all collection system components and plan for facility replacement.

GOALS – SHORT AND LONG TERM

Short Term:

1. Rehabilitate pipe sections that have been identified as needing repair/replacement.
2. Implement a systematic maintenance program based on past years data to identify lines that need to be cleaned and give each line segment a rating to be evaluated by Closed Circuit Television Van (CCTV).
3. Implement a systematic CCTV program based on the maintenance line segment ratings to identify intrusion of roots, grease and/or structural defects and also check on the effectiveness of the District's cleaning procedures and equipment.
4. Continue to monitor the compliance from institutional facilities with the District's voluntary fats, oils & grease source control program.
5. Continue to enhance the District's Geographic Information System (GIS) of the collection system piping, including routine updating of the District's maintenance activities consisting of cleaning, CCTV, and manhole inspection.
6. Continue to prioritize and make repairs on collection system piping as it is found during regular CCTV'ing activities.
7. Continue to promote and fund a program which provides a financial incentive to property owners (offering a rebate up to \$2,000) for the rehabilitation and/or replacement of private sewer laterals. The District's FY 2011-12 funding for this program is \$40,000.
8. Investigate and analyze the need for more Smart Covers to assist the District in identifying sources of Inflow & Infiltration (I&I) and to prevent SSO's.

MONTECITO SANITARY DISTRICT
Collection System Maintenance & Renovation Program – 2011

9. Create a lift station maintenance program consisting of a routine maintenance schedule and emergency by-pass training.

Long Term:

1. Continue to investigate the I&I issues that are known to exist within the District.
2. Clean entire collection system performing a complete condition appraisal of each line segment.
3. Inspect and record the entire collection system with the closed circuit television van.
4. Investigate, research and budget for the purchase of a new Hydro Cleaning Truck.

ACTIONS COMPLETED IN 2011

1. Performed CCTV inspection of approximately 10 miles of collection system piping.
2. Approximately 32 miles of collection system piping has been cleaned over the course of the past year.
3. Promoted and provided financial incentive for the rehabilitation/replacement of private sewer laterals. In 2011, 13 property owners participated in this program and replaced/repared their deteriorated laterals.
4. A construction project that began in 2009 of approximately 5.53 miles of collection system piping relining/rehabilitation in various locations throughout the District was completed in 2011. The “Notice of Completion” was issued and approved by the Board of Directors on August 8, 2011. The total costs for the construction project was approximately \$1,046,782.
5. Identified and raised/rehabilitated 21 manholes in various locations throughout the District totaling \$22,610.
6. Completed Lift Station No. 1 refurbishment project consisting of new pumps, piping, SCADA controls and the installation of a new auto transfer switch and upgrade to a 125 kv emergency generator. The Capital Improvement Project Cost a total of \$137,505.

7. The District purchased a new 6" DV100C Power Prime portable by-pass pump in the amount of \$30,873 for emergency purposes at the four lift stations. Lift Stations No. 1, 2 & 4 currently have standby generators.
8. On December 12, 2011 the District Board of Directors approved the advertisement for Bids for the purchase of a complete Closed Circuit Television Van. The District has budgeted \$150,000 for this project.

2011 SANITARY SEWER OVERFLOW (SSO) REPORT SUMMARY

PRIVATE

1. 6/02/11 – 545 Picacho Lane: Property line clean-out of the sewer lateral overflowed; a bathroom located in the back of the house was not connected to the private sewer lateral that had been recently replaced. The spill was approximately 25 gallons and remained within the property. The property owner contacted a plumbing contractor for clean-up and proper connection.
2. 12/09/11 – 2340 Sycamore Canyon Road: Property line clean-out of the sewer lateral overflowed due to excessive use of water. The spill was approximately 5 gallons. The owner was required to contact a plumber to clean their lateral.

DISTRICT

1. 3/09/11 – Category 2: 211 San Ysidro Road – during a bypass of the District mainline for the slip-lining / rehabilitation project, the contractor, Repipe-CA caused a spill of approximately 150 gallons to occur. The path of the spill traveled from the property line clean-out along the side of the residence and into the basement. The contractor called in a restoration company to clean up and repair damage to the residence and property.
2. 6/04/11 – Category 1: Manhole #921-5F in the roadway in front of 726 San Ysidro Road. Grease caused a spill of approximately 300 gallons to occur. The path of the spill ran down the road into a private drainage channel on private property. The Collection Crew used the Vac-Con to clear the blockage. The surface area of the spill was sprayed with micro-septic liquid disinfectant.

MONTECITO SANITARY DISTRICT
Collection System Maintenance & Renovation Program – 2011

3. 7/09/11 – Category 2: 1658 East Valley Road – heavy roots caused a spill of approximately 65 gallons to occur. The path of the spill ran along a private drive into dirt. The Collection Crew used the Vac-Con to clear the blockage and the surface area of the spill was sprayed with micro-septic liquid disinfectant.
4. 7/18/11 – Category 2: S Jameson Lane/Eucalyptus Lane – a vehicle ran the stop sign coming off of Highway 101 through the intersection, lost control and ran into the air release valves for Lift Station 4 and cracked the 2" PVC riser causing a spill of approximately 825 gallons. The spill traveled down the street into a dirt path. The Collection Crew used sand bags to contain the spill and used the Vac-Con to vacuum and recover the spill. The Vac-Con water hose was used to wash down the area and vacuum up the wash down water. The area was sprayed with micro-septic liquid disinfectant.
5. 9/03/11 – Category 2: 514 Parra Grande Lane – roots and paper towels caused a spill of approximately 70 gallons to occur. The spill traveled down the street in a dirt path along the side of road. The Collection Crew used the Vac-Con to clear the blockage and the surface area of the spill was sprayed with micro-septic liquid disinfectant.

MONTECITO SANITARY DISTRICT

Mission, History and Future Goals

OUR MISSION

To provide the residents of Montecito with a community service to protect public health and to preserve the natural environment through collection, treatment and disposal of wastewater in the most cost effective way possible.

To meet all regulatory discharge requirements as directed by Local, State and Federal agencies.

OUR BACKGROUND

The Montecito Sanitary District (MSD) is an independent special district voted into existence in 1947 by the residents of Montecito. A few highlights of MSD's history include the following:

- 1947: The Montecito Sanitary District was voted into existence by the residents.
- 1947-1960: The community worked toward implementation of service by approving a bond issue, selecting a plant site, and establishing a District boundary.
- 1960: A \$900,000 bond issue was passed to build a 750,000 gallon per day extended aeration, secondary treatment plant, an ocean outfall and trunk sewer system.
- 1961-1969: Six assessment districts were formed to finance the installation of 70 miles of collection system pipelines.
- 1981: Voters approved a \$3.1 million revenue bond issue to incorporate new technology and expand the plant's capacity to 1.5 MGD.
- 1982-1999: During this time period a second activated sludge reactor basin was added to the treatment plant; two additional secondary clarifiers were constructed; the volume of the aerobic digester was increased; a dissolved air flotation thickener and a belt filter press were installed; a second effluent chlorine contact chamber was constructed along with a de-chlorination chamber; a 250 KW emergency generator was installed at the treatment plant. In the mid 1990's, sodium hypochlorite and sodium bisulfite liquids, replaced gaseous chlorine and sulfur dioxide for safety reasons.

MONTECITO SANITARY DISTRICT
Mission, History and Future Goals -- Continued

- 2000 - 2006: During this time period the District completed the following capital improvement projects: bulk chemical storage tanks were replaced with larger, double wall containment with earthquake restraints; six new disinfection chemical feed pumps for sodium hypochlorite and sodium bisulfite were installed, improving reliability and adding redundancy; a paperless data trend process recorder was installed; an aeration system optimization project was completed, the laboratory was upgraded; the influent pump station was replaced, increasing the station's pumping capacity from 3.5 MGD to 5.0 MGD; a SCADA control center and the construction of a new 3,600 square foot maintenance building.
- 2007 - 2008: The Montecito Board of Director's identified and approved "mission critical" capital improvement projects totaling approximately \$11 million. The District then issued Certificates of Participation (COP's) to fund the capital program. The following projects were completed in 2007 and 2008: a new SCADA server with expandability for future was put on line for the influent pump station control; the waste activated sludge pump was replaced; the aeration air header made of deteriorated ductile iron pipe was replaced with a new stainless steel pipe; a new 125 KW portable emergency generator that can be used to power a portion of the treatment plant or as a redundant back up at pump stations was purchased; the Posilipo Lift Station (Lift Station No. 4) was completely refurbished including the replacement of the existing 6" dual force mains with dual 8" lines; a new fully redundant pumping system (three new pumps) were installed along with an automatic switch over to generator power.
- 2009: The District completed the following capital improvement projects: the influent channel grinders were replaced with two new units increasing flow volume from 3.5 mgd to 6.0 mgd; the secondary clarifiers (3 & 4) were refurbished and the effluent channel was refurbished.
- 2010: Completed the refurbishment of two motor control centers (MCC) and replacement of another (MCC); installation of a new 450 KW emergency diesel powered generator providing 100 percent of the treatment plant and associated facilities power requirements during main power outages. The total cost of these treatment plant electrical upgrades was \$540,000. The new laboratory building design and site grading was completed in the fall of 2010.

MONTECITO SANITARY DISTRICT
Mission, History and Future Goals -- Continued

- 2011: The new laboratory building construction was completed in December 2011 and the District Board accepted the project as complete in January 2012. Also completed in 2011 were upgrades to the treatment plant SCADA monitoring system. Additional essential treatment plant equipment was added to the SCADA system. An after-hours alarm notification system was added to the SCADA system as the primary notification system with the existing auto dialer (ADA) becoming the back up. Three effluent disinfection chemical dosing pumps were replaced with new pumps.
- Goals for 2012: A laboratory consulting firm has been contracted to provide training to the operations staff on newly prepared Quality Assurance & Quality Control manuals. This consultant will also be assisting with the certification of the new laboratory by the California Environmental Laboratories Accreditation Program.

Capital projects for 2012 include the following: Belt-filter Press refurbishment / replacement; Aeration Blower replacement ; Secondary Clarifiers No's 1 - 4 refurbishment; replacement of three disinfection chemical dosing pumps.